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Applicant(s): Eric Karplus, Richard Farrell, Kanai Shah  
Appn. Title: Position Sensitive Solid State Detector with Internal Gain  
Examiner/GAU: \_\_\_\_\_

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East Falmouth, MA

**Response to Formalities Letter  
Confirmation No. 4600**

The abstract for this application is as follows:

**POSITION SENSITIVE SOLID STATE DETECTOR WITH INTERNAL GAIN**

The present invention is a solid state detector that has internal gain and incorporates a special readout technique to determine the input position at which a detected signal originated without introducing any dead space to the active area of the device. In a preferred embodiment of the invention, the detector is a silicon avalanche photodiode that provides a two dimensional position sensitive readout for each event that is detected.

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